



Docket No.: 1081.1115

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of:

Osamu Kawai

Serial No. 09/811,549

Group Art Unit: 3621

Confirmation No. 9082

Filed: March 20, 2001

Examiner: Cheung, Mary Da Zhi Wang

For: MANAGEMENT DEVICE, NETWORK APPARATUS, AND MANAGEMENT METHOD

BRIEF IN SUPPORT OF APPEAL

Mail Stop Appeal Brief-Patents
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action in the above-identified application, and pursuant to the Notice of Appeal filed on October 21, 2005, Applicants submit the present Brief with the fee of \$500.00 set forth by 1.17(c). A Petition for an Extension of Time and the required fee of \$450.00 requesting a two-month extension are concurrently filed herewith, extending the period for filing the Brief in Support of Appeal to February 21, 2006.

(I) Real Party In Interest

The real party in interest in the present appeal is the assignee Fujitsu Limited.

(II) Related Appeals and Interferences

The undersigned attorney, the appellant and the assignee know of no related appeals or interferences which would be directly affected by or directly affect or have a bearing on the Board's decision in the present appeal.

(III) Status of Claims

Claims 1-17 are currently pending. Claims 1-17 stand finally rejected and are appealed.

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(IV) Status of Amendments

No amendments have been filed subsequent to the final rejection.

(V) Summary of Claimed Subject Matter

The present invention is directed to a method for managing sharing of computer terminal costs when a plurality of service business entities, for instance, are sharing the cost of network terminals. For example, when a new business entity is added to provide a service, a terminal management device of the present invention computes differences in shared costs of each of the business entity. See Specification of the Present Invention, page 4, line 19 – page 5, lines 6-10. In at least one embodiment of the present invention, a storing unit is included and stores a combination including a business entity providing service to the network apparatus and costs associated with the providing of the service to assist in managing the sharing of costs. Therefore, in at least one embodiment of the invention, the stored combination includes two components: (1) a business entity providing a service; and (2) costs related to the service.

As illustrated in Figure 1 and as defined by claim 1, for example, in at least one embodiment of the present invention, a support server 40 is included on a network. See Figure 1 of the Present Invention. See *also* Specification of the Present Invention, page 7, lines 19-26. The support server 40 performs network terminal management tasks of the present invention. More specifically, the support server 40 manages the proportional shares of costs of network terminals on the network and the types of services that a network terminal receives. See Specification of the Present Invention, page 7, lines 21-26.

As illustrated in Figures 4A, 4B, 4C, and 4D, in at least one embodiment of the present invention, support server 40 can include stored tables. The support server 40 manages, in accordance with the tables, a network terminal ID (MID) for identifying a network terminal, a subscriber ID for identifying a subscriber, a VAM-ID for identifying a service business entity, and an affinity ID for identifying the combination type including at least one service business entity bearing the costs of network terminals. See Specification of the Present Invention, page 9, lines 15-25.

For example, the network terminal table (machine table) shown in Figure 4A stores a subscriber ID corresponding to each network terminal ID (MID), and the unit cost information of each network terminal. The subscriber table shown in Figure 4B stores each subscriber ID, affinity ID, charge type, and a subscriber name, corresponding to a subscriber ID. The affinity table illustrated in Figure 4C stores a VAM-ID corresponding to each affinity ID and the

proportional share of network terminal costs of a service business entity corresponding to each VAM-ID.

As illustrated in Figure 4C, for example, affinity ID = "af3" is an example in which service business entities ISP1, ASP1, ASP2, and ASP3 share the cost of network terminals, and the proportional shares thereof are, for example, .43 for service business entity ISP1, .21 for both service business entity ASP1 and service business entity ASP2, and .15 for service business entity ASP3. See Specification of the Present Invention, page 10, lines 1-12. See also Figure 4C.

As illustrated in Figure 11 and as defined by claim 10, for example, in at least one embodiment of the present invention, an affinity ID stored in a network terminal 10 can be changed using a storage medium capable of being removed from a network terminal 10. The network terminal 10 can transmit to the support server 40 an access request including an indication that the information should be used from the storage medium and transmitted to the support server.

In at least one embodiment of the present invention, as defined by claim 17, in a situation in which a new business entity is added to a network to provide services after the terminal devices have been distributed, the terminal management device computes and totals the differences of shared costs of each business entity, which can change in accordance with the new business entity. Thus, by managing the changes of a plurality of business entities bearing the costs related to terminal devices, changes in the shares of the costs of the business entities can be adjusted easily even in a case that business entities using the terminal devices are added. See Specification of the Present Invention, page 26, lines 1-12.

(VI) Grounds Of Rejection To Be Reviewed On Appeal

- A. Claims 10-12 and 16 stand rejected as being anticipated under 35 U.S.C. § 102 by U.S. Patent Number 6,333,979, issued to Andre B. Bondi *et al.* (hereinafter referred to as Bondi).
- B. Claim 13 stands rejected as being unpatentably obvious under 35 U.S.C. § 103 as being unpatentable over Bondi.
- C. Claims 1-9, 14-15, and 17 stand rejected as being unpatentably obvious under

35 U.S.C. § 103(a) as being unpatentable over Bondi in view of U.S. Patent Number 6,064,653, issued to Robert D. Farris (hereinafter referred to as Farris)

(VII) Argument

- A. Claims 10 –12 and 16 stand rejected as being anticipated under 35 U.S.C. § 102 by Bondi. Claims 10-12 and 16 stand or fall together as a group.

1. Background of the Reference on which the Rejection is Based

Bondi is directed to an apparatus and method for routing calls to communication processing centers based on a destination plan. According to Bondi, calls are allocated based on area codes, regions, or other predetermined categories to particular communication processing centers. Incoming telephone communications are routed to communication processing centers based on various parameters such as numbering plan areas, etc. The capacity of each communication processing center is also determined, according to Bondi. According to Bondi, each communication center's free capacity is calculated for designated time intervals. See Bondi, Summary of the Invention, column 1, lines 28-46.

Historical call volume data can be collected, categorized, and saved, based on one or more predetermined categories of interest. See Bondi, column 7, lines 16-18. A linear programming model can be "set up" to determine a destination plan, according to Bondi. The destination plan operates subject to a set of coefficients and constraints, which describe the communication processing system. The linear programming model uses input parameters, and the input parameters and/or coefficients may be unit costs that could be communication processing center dependent .

2. Relevant Law

By its language, 35 U.S.C. § 102 requires that each and every element of a claim be present in a single cited reference to properly have the reference anticipate the claim. See *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566, 1567 (Fed. Cir. 1992), citing *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675,677, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988); *Lindemann Maschinenfabrik v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984); *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics*,

Inc., 976 F.2d 1559, 24 USPQ2d 1321, 1326 (Fed. Cir. 1992); and *Elmer v. ICC Fabricating Inc.*, 67 F.3d 1571, 36 USPQ2d 1417, 1419 (Fed. Cir. 1995).

3. Application of the Relevant Law

Applicants submit that claim 10 is patentable over Bondi, as Bondi does not disclose, “a storing unit storing a combination type of business entities bearing costs related to the network apparatus, wherein said combination type is a type of a combination of *business entities providing service* to network apparatuses and *corresponding costs* of the business entities related to the providing [emphasis added].”

In the “Response to Arguments” section of page 2 of the Office Action, the Examiner states, “Bondi teaches . . . the destination plan specifies the service provided to the terminal and corresponding costs of providing the service to the terminal.”

On page 3 of the Office Action, the Examiner further states, “Bondi teaches. . . managing the cost of said distributed network apparatus by the business entity providing the added service and a business entity providing an existing service.” The Examiner cites the following sections of Bondi for support for the allegation: column 4, line 49 – column 5, line 65, column 7, lines 16-63, column 9, lines 55-62, column 14, lines 57-59, and column 15, line 6 – column 16, line 12.

Applicants submit that column 5, line 50 of Bondi indicates that information about the nature of services *likely to be sought by a subscriber or customer* may be compiled, emphasis added. For example, in Bondi, if a customer has a history of asking for the call center in a particular region, information indicating that the customer typically requests a call center in the particular region is compiled. Bondi’s “nature of services likely to be sought by a subscriber or customer” is completely different from the present invention’s “business entities providing service.” Bondi does not disclose information indicating that a *business entity that provides service* is included in the maintained information.

The costs in Bondi do not relate to a “providing” of a service to a network apparatus by a business entity. Bondi does not provide additional details regarding “unit costs.” Applicants submit that Bondi is directed toward determining optimal destination plans for calls and considering that Bondi explicitly states that, “unit costs. . . could be communication processing center dependent,” the “unit costs” are most likely related to costs of a call to a customer, for example, five cents per minute cost to the customer if the call is routed through a particular communication processing center, and are not costs of business entities related to providing service. See Bondi, column 7, lines 44-46.

Moreover, in contrast to the present invention, Applicants respectfully submit that Bondi does not teach, "a communicating unit sending said combination type stored in said storing unit with a network connection request to a predetermined server on the network," nor does Bondi teach "a storing unit," as identified by the language of the claim.

Bondi simply describes input parameters used for a linear programming model. Thus, assuming *arguendo* that Bondi does teach the combination feature argued above, Bondi does not send a combination including a business entity and corresponding costs of the business entity. Bondi clearly states that the linear programming model is simply executed. See Bondi, column 7, lines 64-67.

In light of the foregoing, independent claims 10 and 16 are patentable over Bondi, for at least the reasons presented above. As claims 11-12 depend from independent claim 10, claims 11-12 are patentable over Bondi for at least the reasons presented above.

B. Claim 13 stands rejected as being unpatentably obvious under 35 U.S.C. § 103 over Bondi.

1. **Relevant Law**

To establish a *prima facie* case of obviousness, one of the three basic criteria that must be met is that the reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the references, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

2. **Application of the Relevant Law**

On page 5 of the Office Action, the Examiner states, "Bondi teaches all claimed limitation

[sic] as discussed above except for a removable storage medium placed in the network apparatus. However, a removable storage medium is well known in the art, and it would have been obvious to one of ordinary skill in the art to include a removable storage medium placed in the network apparatus of Bondi."

Applicants respectfully submit that the Examiner has not provided a *prima facie* case of obviousness. More specifically, Applicants submit that the language identified by claim 13 describes a situation in which a communicating unit sends the combination type read from a removable storage medium instead of the combination stored in a storing unit, when the combination is read from the storage unit.

Therefore, the present invention, as defined by claim 13, does not simply provide a removable storage medium, as alleged by the Examiner. Applicants respectfully submit that the Examiner has not addressed the required teaching or suggestion from Bondi relating to the actual method of sending the combination type read from a removable storage medium (as opposed to the combination stored in a storing unit) when the combination is read from the storage unit. As the Examiner has not addressed the required teaching or suggestion from Bondi, the Examiner has failed to establish a *Prima Facie* case of obviousness.

In light of the foregoing, claim 13 is patentable over Bondi.

C. Claims 1-9, 14-15, and 17 stand rejected as being unpatentably obvious under 35 U.S.C. § 103(a) over Bondi in view of Farris. Claims 1-9, 14-15 and 17 stand or fall as a group.

1. Relevant Law

To establish a *prima facie* case of obviousness, one of the three basic criteria that must be met is that the reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the references, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the

artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

2. Application of the Relevant Law

Applicants respectfully submit that neither Bondi nor Farris, taken alone or in combination, teaches or suggests, "a storing unit storing management information to classify each network apparatus based on a combination type, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding shared costs of each of the business entities related to the providing."

As previously argued, there is no teaching of the feature in Bondi. Bondi, therefore, does not, "classify each network apparatus based on a combination type, wherein said combination type is a type of a combination of business entities providing service to a network apparatus and corresponding shared costs of each of the business entities related to the providing," as recited by the language of claim 1.

Applicants respectfully submit that Bondi also does not offer a suggestion of the feature. In the "Response to Arguments" section of page 2, the Examiner states that, "the teaching of routing communications in Bondi corresponds to the limitation of "classify." Bondi clearly states that the term "routing" denotes the general concept of directing an incoming signal to a specific one of communication processing centers. See Bondi, column 4, lines 30-32. Thus, assuming *arguendo* that Bondi teaches the combination type of the present invention, Bondi merely directs signals to processing centers. Directing signals to processing centers is a different operation than classifying network apparatuses based on a combination type, as identified by the language of claim 1, for example, describing the function of the storing unit.

Similarly, Farris does not offer a *teaching* or suggestion of the feature. Farris is directed to voice calls between two end location gateway servers of a data internetwork. In particular, Farris is concerned with monitoring (e.g., measuring response time, percentage utilization, etc.) data traffic between two end nodes of a data internetwork. Farris does not provide disclosure or any suggestion regarding classifying a network apparatus based on a combination type, as identified by the language of claim 1.

Therefore, independent claims 1, 14-15, and 17 are patentable over Bondi in view of Farris, as neither Bondi nor Farris, taken alone or in combination, teaches or suggests the above-identified features of the present invention.

Conclusion

Applicants respectfully submit that the Examiner has not established anticipation of the relevant claims, nor has the Examiner established a prima facie case of obviousness by preponderance of the evidence for the relevant claims. Reversal of the rejection is, therefore, requested.

Respectfully submitted,

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VIII. Claims Appendix

1. (PREVIOUSLY PRESENTED) A management device to manage a share of costs related to network apparatuses, said management device comprising:

a storing unit storing management information to classify each network apparatus based on a combination type, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding shared costs of each of the business entities related to the providing of the network apparatuses, each network apparatus receiving the service from a business entity specified by said combination type; and

a managing unit managing sharing of costs related to each network apparatus based on said combination type.

2. (PREVIOUSLY PRESENTED) The management device according to claim 1, wherein said management information comprises the shared cost or proportional share of business entities in each combination type, and when said combination type is changed relative to each network apparatus, said managing unit computes for each business entity a difference between the cost, which each business entity corresponding to the combination type of prior to the change is already bearing, and the cost, which each business entity corresponding to the combination type of subsequent to the change will bear.

3. (PREVIOUSLY PRESENTED) The management device according to claim 2, wherein, when said combination type is changed relative to each network apparatus, the combination type of each network apparatus stored in said management information is updated to the combination type of subsequent to the change, said managing unit executes said computation relative to all network apparatuses for which said combination type is updated.

4. (PREVIOUSLY PRESENTED) The management device according claim 1, wherein each network apparatus is connected to a network.

5. (PREVIOUSLY PRESENTED) The management device according to claim 2, wherein each network apparatus is connected to a network, and

said management device further comprises a communicating unit receiving via a network, a network connection request from each network apparatus, and, when said combination type is changed relative to each network apparatus, the combination type of each

network apparatus stored in said management information is updated to the combination type of subsequent to the change,

said managing unit executes said computation relative to at least one of the network apparatuses which sent the network connection request.

6. (PREVIOUSLY PRESENTED) The management device according to claim 1, wherein each network apparatus is connected to a network,

said management device further comprises a communicating unit receiving said combination type stored beforehand in a network apparatus with a network connection request from the network apparatus, and

when said combination type is changed relative to each network apparatus, the combination type of each network apparatus stored in said management information is updated to the combination type of subsequent to the change,

said managing unit compares said received combination type with the network apparatus combination type stored in said management information, and in the case of a match, sends to the network apparatus information corresponding to the combination type, and in a case that there is not a match, sends to the network apparatus information corresponding to the combination type stored in said management information, and furthermore, by sending to the network apparatus the combination type of subsequent to said change, updates the combination type stored in the network apparatus to the combination type of subsequent to said change.

7. (PREVIOUSLY PRESENTED) The management device according to claim 1, wherein each network apparatus is connected to a network,

said management device further comprises a communicating unit receiving said combination type sent from a network apparatus with a network connection request from the network apparatus, and

said managing unit compares said received combination type with the network apparatus combination type stored in said management information, and in the case of a match, sends to the network apparatus information corresponding, to the combination type, and in a case that there is not a match, sends to the network apparatus information corresponding to said received combination type, and furthermore, updates the network apparatus combination type stored in said management information to said received combination type.

8. (PREVIOUSLY PRESENTED) The management device according to claim 7, wherein, in a case that there is no said match, upon receiving predetermined temporary change information together with said combination type sent from the network apparatus, said communicating unit sends to the network apparatus information corresponding to said received combination type, and does not update said management information.

9. (ORIGINAL) The management device according to claim 1, wherein costs related to each network apparatus are the purchasing costs of said network apparatus.

10. (PREVIOUSLY PRESENTED) A network apparatus capable of connecting to a network, said network apparatus comprising:

a storing unit storing a combination type of business entities bearing costs related to the network apparatus, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding costs of the business entities related to the providing of the network apparatuses, each network apparatus receiving the service from the business entities specified by said combination type; and

a communicating unit sending said combination type stored in said storing unit with a network connection request to a predetermined server on the network.

11. (PREVIOUSLY PRESENTED) The network apparatus according to claim 10, further comprising:

an overwriting unit, when said communicating unit receives said combination type from said server, overwriting said combination type stored in said storing unit with said received combination type.

12. (PREVIOUSLY PRESENTED) The network apparatus according to claim 10, further comprising:

an overwriting unit, when said communicating unit receives said combination type from said server, comparing said combination type stored in said storing unit with said received combination type, and in a case that there is no match, overwriting the combination type stored in said storing unit with said received combination type.

13. (PREVIOUSLY PRESENTED) The network apparatus according to claim 10, wherein, when a predetermined combination type is read from a removable storage medium

placed in the network apparatus, said communicating unit sends the combination type read from said removable storage medium instead of said combination type stored in said storing unit with a network connection request to a predetermined server on the network.

14. (PREVIOUSLY PRESENTED) A management method executed by a computer to manage costs related to network apparatuses, the method executed by the computer comprising:

classifying each network apparatus based on a combination type, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding costs of the business entities related to the providing of the network apparatuses, each network apparatus receiving the service from a business entity specified by said combination type; and

managing a share of costs related to each network apparatus based on said combination type.

15. (PREVIOUSLY PRESENTED) A storage medium capable of being read by a computer, said storage medium storing a program comprising:

classifying each network apparatus connecting a network in accordance with a combination type of business entities bearing costs related to each network apparatus, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding costs of the business entities related to the providing of the network apparatuses, each network apparatus receiving the service from a business entity specified by said combination type; and

managing a share of the costs related to each network apparatus based on said combination type.

16. (PREVIOUSLY PRESENTED) A storage medium capable of being read by a computer, said storage medium storing:

data of a combination type of business entities bearing costs related to each network apparatus connecting a network, wherein said combination type is a type of a combination of business entities providing service to network apparatuses and corresponding costs of the business entities related to the providing of the network apparatuses, each network apparatus receiving the service from business entities specified by said combination type; and

a program for sending said combination type with a network connection request to a

predetermined server on the network.

17. (PREVIOUSLY PRESENTED) A management method executed by a computer to manage cost of a network apparatus capable of utilizing a service provided by a business entity, the method executed by the computer comprising:

managing the cost of a distributed network apparatus; and

in a case that a service capable of being utilized by said network apparatus is added, managing the sharing of the cost of said distributed network apparatus by the business entity providing the added service and a business entity providing an existing service.

18. (CANCELLED)

IX. Evidence Appendix

Not applicable.

X. Related Proceedings Appendix

Not applicable.